



UNITED STATES DEPARTMENT OF COMMERCE
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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
09/503,760	02/14/00	STONE	C 11610US02

IM62/0925
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EXAMINER

ZITOMER, F

ART UNIT	PAPER NUMBER
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1713

DATE MAILED:

09/25/00

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.
09/503,760

Applicant(s)
Stone et al.

Examiner
Fred Zitomer

Group Art Unit
1713



☒ Responsive to communication(s) filed on Aug 24, 2000

☐ This action is FINAL.

☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 3 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

Disposition of Claims

☒ Claim(s) 1-63 is/are pending in the application.

Of the above, claim(s) 3-5, 7-17, 19, 21, 23, 25-28, and 31-63 is/are withdrawn from consideration.

☐ Claim(s) _____ is/are allowed.

☒ Claim(s) 1, 2, 6, 18, 20, 22, 24, 29, and 30 is/are rejected.

☐ Claim(s) _____ is/are objected to.

☐ Claims _____ are subject to restriction or election requirement.

Application Papers

☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The drawing(s) filed on _____ is/are objected to by the Examiner.

☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☐ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been
☐ received.

☐ received in Application No. (Series Code/Serial Number) _____.

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____.

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

☐ Notice of References Cited, PTO-892

☒ Information Disclosure Statement(s), PTO-1449, Paper No(s). 7

☒ Interview Summary, PTO-413

☐ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

--- SEE OFFICE ACTION ON THE FOLLOWING PAGES ---

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1.

Applicant's election with traverse of Group I, claims 1-30, and the elected species of claim 1 wherein A₁ is methyl and A₂ is hydrogen, in Paper No. 6 and the FAX transmission of September 21, 2000 are acknowledged. The traversal is on the ground that the membranes of Groups I and II can be readily searched together. This is not found persuasive for at least the following reasons:

- Group II reads on membranes functionalized with ion exchange groups. Said membranes require additional search in another group.

- the different membranes of Group II entail issues which would make a concurrent search burdensome.

The requirement is still deemed proper and is therefore made FINAL.

It is agreed that claims 1,2,6,18,20,22,24,29 and 30 read on the elected species.

2.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1,2,6,18,20,22,24,29 and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over D'Agostino et al., US 4,012,303.

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D'Agostino teaches membranes of the present polymer base grafted with monomer units of present formula (I) absent non-hydrogen substituents "A₁" and "A₂" [column 3, line 25 - column 4, line 37]. The membranes are precursors for ion exchange membranes [Abstract]. D'Agostino differs from the instant invention by lacking a graft monomer wherein at least one of "A₁" or "A₂" is other than hydrogen. More directly, applicant's elected species wherein A₁ is methyl and A₂ is hydrogen differs from D'Agostino merely by a methylene group. This is analogous to a homologous relationship wherein a class of progressive structures vary by incremental methylene groups. It is well settled that absent the showing of criticality it is obvious to expect homologs to possess similar physical and chemical properties in keeping with their closely related structures. *In re Farkas*, 152 USPO 109; *In re Henze*, 850 USPO 261; *In re Hoch*, 166 USPO 406; *In re Finley*, 810 USPO 383; *In re Hoke*, 195 USPO 148; *In re Archer*, 734 OG 545; *In re Wood*, 199 USPO 137. It would have been obvious to prepare membranes of the present composition in the expectation of obtaining precursors for electrochemical cell membranes because membranes of closely related structure were known to have the required properties at the time of the instant invention.

3.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

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Claim 30 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The expression "...at least a portion..." is a relative expression which renders the claim indefinite. "At least" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree of cross linking, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention.

4.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Fred Zitomer whose telephone number is (703) 308-2461. The examiner can normally be reached Monday through Friday from 7:30 AM to 4:00 PM.

The fax phone number for the organization where this application or proceeding is assigned is (703) 305-3599.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-2351.



**FRED ZITOMER
PRIMARY EXAMINER
GROUP 1710**

Zitomer/fz
September 24, 2000